CLAIMS

1. A computing device having programmable state transitions, comprising:

a real-time clock that generates a signal in response to said real-time clock attaining a programmed time of day; and

a processor, coupled to said real-time clock that receives said signal and transitions from a hibernate to a standby state.

2. The computing device of claim 1, wherein said real-time clock generates a second signal in response to attaining a second programmed time of day, and wherein said processor receives said second signal and transitions from said standby to an active state.

3. The computing device of claim 2, wherein said real-time clock generates a third signal in response to attaining a third programmed time of day, and wherein said processor receives said third signal and transitions from said active to said hibernate state.

4. The computing device of claim 2, wherein said real-time clock generates a third signal in response to attaining a third programmed time of day, and wherein said processor receives said third signal and transitions from said active to said standby state.

5. The computing device of claim 4, wherein said real-time clock generates a fourth signal in response to attaining a fourth programmed time of day, and wherein said processor receives said fourth signal and transitions from said standby to said hibernate state.

6. The computing device of claim 1, wherein said real-time clock generates a second signal in response to attaining a second programmed time of day, and wherein said processor receives said second signal and transitions from said standby to said hibernate state.

7. In a computing device, a method for transitioning from a hibernate to a standby state, said method comprising:

a real-time clock generating a signal that is conveyed to a processor coupled to said real-time clock, said signal indicating that said real-time clock has attained a programmed time of day; and

said processor transitioning from a hibernate to a standby state in response to receiving said signal.

8. The method of claim 7, further comprising said processor reading a memory location that stores a time event flag, said time event flag requesting said processor to transition from said hibernate to said standby state.

9. The method of claim 8, further comprising said processor storing a second time event flag that requests said processor to transition from said standby to said hibernate state, said storing being performed after said reading.

10. The method of claim 7, further comprising said real-time clock generating a second signal that indicates said real-time clock has attained a second time of day.

11. The method of claim 10, further comprising said processor reading a memory location that stores a time event flag, said time event flag requesting said processor to transition from said standby to said hibernate state.

12. The method of claim 7, further comprising said computing device receiving said programmed time of day and storing said programmed time of day in a memory accessible to said real-time clock.

13. In a computing device having programmable state transitions, a method for responding to a power management event, comprising:

canceling a time event flag stored in a memory location;

determining said power management event;

storing a second time event flag into said memory location, wherein said second time event flag is set to one of a standby and a hibernate state, said storing occurring if said power management event is a request to transition to an active state and if a current time of day corresponds to a scheduled active time period.

14. The method of claim 13, wherein said second time event flag is a request to transition to said hibernate state.

15. The method of claim 13, wherein said second time event flag is a request to transition to said standby state.

16. The method of claim 13, wherein if said power management event is a request to transition to said standby state and if said current time of day does not correspond to a scheduled active period, then additionally performing:

rejecting said request to transition said computing device to said standby state;

setting said second time event flag to standby; and

setting said time event flag to hibernate.

17. The method of claim 13, wherein if said power management event is a request to transition to a hibernate state, then additionally performing:

setting said time event flag to hibernate.

18. In a computing device having programmable state transitions, a method for responding to a time event flag, comprising:

determining if said time event flag is a request to set said computing device to a hibernate state;

setting a second time event flag to standby if said time event flag is set to hibernate; and

requesting said computing device to enter said hibernate state.

19. The method of claim 18, additionally comprising prompting a user of said computing device to confirm that said computing device should enter said hibernate state, said prompting being performed prior to said requesting action.

20. The method of claim 18, wherein, if said time event flag is not a request to set said computing device to a hibernate state, the method further comprises:

setting said second time event flag to hibernate; and,

requesting said computing device to enter a standby state.

21. In a computing device, a method of receiving state transitions from a user, comprising:

receiving an input of a time event flag;

receiving an input of a time of day that corresponds to said time event flag;

storing said time event flag and said time of day that corresponds to said time event flag as an element of a transition schedule within a memory of the computing device.

22. The method of claim 21, wherein said time event flag is a request to transition said computing device to a hibernate state.

23. The method of claim 21, wherein said time event flag is a request to transition said computing device to a standby state.

24. The method of claim 21, wherein said time event flag is a request to transition said computing device to an active state.

25. One or more computer-readable media having computer-readable instructions thereon, which, when executed by a computer, cause the computer to generate a file used to transition from a hibernate to a standby state, the method comprising:

storing a time of day in memory;

generating, by a real-time clock, a signal that is conveyed to a processor coupled to said real-time clock, said signal indicating that said real-time clock has attained a programmed time of day; and

said processor transitioning from a hibernate to a standby state in response to receiving said signal.

26. One or more computer-readable media having computer-readable instructions thereon, which, when executed by a computer, cause the computer to generate a file used to transition from a hibernate to a standby state, the method comprising:

canceling a time event flag stored in a memory location;

determining said power management event;

storing a second time event flag into said memory location, wherein said second time event flag is set to one of a standby and a hibernate state, said storing occurring if said power management event is a request to transition to an active state and if a current time of day corresponds to a scheduled active time period.

27. One or more computer-readable media having computer-readable instructions thereon, which, when executed by a computer, cause the computer to generate a file used to transition from a hibernate to a standby state, the method comprising:

determining if said time event flag is a request to set said computing device to a hibernate state;

setting a second time event flag to standby if said time event flag is set to hibernate; and

requesting the computing device to enter the hibernate state.